

# The Campus Solar Installation Situation

## **Problem Statement:**

The financial results and forward-looking outcomes of the solar installation project are very far from what was estimated or expected. Since commissioning eight months ago the dual electric bills paid to APS & SSH have exceeded the previous single bill on a Month Over Month basis by more than \$75,000 and are projected to be a negative impact of approximately \$120,000 for the first year.. The "promise" of annual positive cash flows to the Campus every year of the 25 year planning horizon (totaling +\$6,632,252) will now actually be several million dollars to the negative under the contracted Solar Services Agreement (SSA). The JCC believes that they have been severely misled by the solar provider and seeks remediation, restitution and a revised agreement.

## **Background Information:**

The Ina Levine Jewish Community Campus recently installed an expansive solar (rooftop & carport) systems. The installation was provided by and is owned by a third party under a Solar Service Agreement (SSA). The Campus now makes "two" utility payments per month, one to the traditional electrical provider (APS) and one to the SSA provider. The latter payment is a twenty year commitment based upon an escalating rate (\$ per kWh) times the production output of the solar installation.

Since commissioning in the Fall of 2012 the Campus has noticed that the sum of their two monthly payments greatly exceeds their prior single monthly payment to APS on a YOY basis. This is quite unexpected and alarming to the Campus as a number of energy efficiency measures were implemented during the same period and the promise of the SSA was to be cash flow positive over an extended period of time.

These agreements are very complicated (and relatively new) business endeavors. For mutual success of the installation it is important that the SSA provider explain and educate the host customer regarding the ongoing financial obligations of the business relationship. Underlying costs need to be discussed and should be compared to industry norms. Assumptions, interest rates and inputs to various models should be transparent and again be tested against industry norms. Accurate projections are critical when analyzing a 25 year performing capital asset with an associated 20 year contract liability. And the installation itself should be sized and designed to fit within the host utility guidelines while optimizing the available return to the customer.





Due to these complexities and the projected enormous negative financial impact the Campus has engaged Energy Management Advisors, LLC to examine and review the aspects of the solar installation and agreement that may be contributing to their higher utility payments. EMA has reviewed several documents and has participated in several discussions and provides the following privileged and confidential information to Association and their counsel.

### **Areas of Concern:**

- 1) The initial project proposal for financing was a contractor-provided operating lease. The lease payments had an annual 3% escalator clause. Energy costs were shown to be rising 6% per year (2X what we have been experiencing and APS projects). In the contractor analysis there was also no degradation factor (usually .5% per year) in the output of the system over time.  
The combination of the three factors above created a projection of a +\$6,632,252 accumulated cash flow over a 25 year period .  
At some point during project planning and review the financing mechanism was switched to an SSA. An SSA is a much more expensive way to finance solar installations and as constructed was much less favorable to the customer than a properly executed, 3<sup>rd</sup> party lease. The contractor however created a spreadsheet) showing a remarkable coincidence that the twenty year cost of the lease would be exactly the same as the twenty year cost of SSA financing (paid on a per kWh generated basis with a 2.51% annual escalator).
  
- 2) The initial first year base rate for the SSA production payments is approximately \$.085 per kWh. This rate is not a representative offset figure for the current value of solar production.
  
- 3) The smaller installation (System 2) was configured for the APS EPR6 rate plan commonly known as "net metering". This allows the customer to get billing credit for incidental excess generation. The larger installation (System 1) was sized too large to capture the preferred rate plan and landed under the EPR2 rate plan. Under EPR2 excess generation is sold back to the utility at a drastically reduced wholesale rate. Both systems however were sized too large and create incidental excess generation power that is either APS credited or paid back to the Campus at



a rate well below what Campus pays SSH for the same system-generated electricity. Thus causing significant negative cash position.

- 4) The SSA Agreement contains an annual price escalator for the payments to the SSA Provider of 2.51%. The main purpose (and longterm customer benefit) of SSA (or PPA) financing is to provide the host customer with a "hedge" against future utility price increases for the amount of electricity the solar generating facility provides. Though there may be no significant savings to the customer in the first couple of years of an SSA arrangement, savings start accruing as a cost avoidance with every utility rate increase. **There should be no price escalator in this SSA!**

